

L 32077-66

ACC NR: AP6013387

apparatus. Cooling of the rotor was done with air at an initial temperature of 200°C. The turbine blades and the rotor disks were made of heat resisting alloys of the austenitic class, the blades of alloy EI-765, and the disks of alloy EI-612K. The temperatures of the metal, the gas, and the air were measured with Chromel-Alumel thermocouples. Experimental data on the temperature fields in the rotor disks are shown in a series of curves. The scheme tested made possible a maximum disk temperature of 500°C, which allows use of a heat resisting steel of the perlite type--alloy EI-415. The consumption of cooling air was 0.82 kg/sec but its distribution over the stages required considerable temperature drops over the thickness of the disks. Orig. art. has: 6 figures and 1 table.

SUB CODE: 21// SUBM. DATE: none/ ORIG REF: 004

Cord 2/2 BAG

L 22290-55 EWA(h)/EWP(k)/EWT(g)/EWT(h)/ETC(m)-6/EWP(w)/EWP(v) IJP(c) EM/WW

ACC NR: AP6007308

UR/0096/66/000/003/0053/0057⁶⁵

AUTHOR: Karpin, Ye.B. (Candidate of technical sciences); Kostyuk, A.G.^B (Candidate of technical sciences); Zuyeva, G.K. (Engineer); Piruyeva, L.V. (Engineer); Sokolov, V.S. (Engineer)

ORG: MEI-KTZ

TITLE: Calculation of unsteady state temperature fields in plates and shells using a computer²⁶

SCURCE: Teploenergetika, no.3, 1966, 53-57

TOPIC TAGS: temperature distribution, computer program, computer calculation, *temperature, shell structure, aerospace structure*

ABSTRACT: The article proposes approximate methods for calculating unsteady state temperature fields which greatly simplify the calculation and which give results which are satisfactory in accuracy for practical purposes. The mathematical development of the method considers a shell of arbitrary shape and variable thickness, with respect to a curvilinear orthogonal coordinate system. The remainder of the article consists of the working out of a detailed computer program for the given problem. The method and the program were used to investigate the effect of different factors on the temperature field and the stresses in turbine vanes and disks. Calculated results are shown in a figure. The solution of

Card 1/2

UDC: 536.12.691.142.35.001.27

L 22290-66

ACC NR: AP6007308

O

the above problem (for heating for a period of 300 seconds) required about 0.75 hours of machine time. In addition, about 0.75 hours are spent in preparing the perforated tape from the starting data. Solution of an analogous problem by hand methods would take about 200 hours. Orig. art. has: 22 formulas and 6 figures.

SUB CODE: 20,09/SUBM DATE: none/ ORIG REF: 007/ OTH REF: 001

Cord 2/2 not

PIRVU, D., dr.; TORJESCU, V., dr.; CEAUSU, E., dr.; TEODORESCU, E., dr.;
PARASCHIV, D., dr.; CALOTA, M., ing. chimist.

Changes in some serum enzymes in anicteric epidemic hepatitis
in children. Microbiologia (Bucur) 10 no.1:77-82 Ja-P'65.

1. Lucrare efectuata in Spitalul orasenes, Turnu Severin.

40883-66 ENT(m)/I/DAF(t) 1376 SOURCE CODE: UR/0229/66/000/001/0015/0050
ACC NR. AP6021719 (N)

AUTHOR: Trifonov, Ye. V.; Yampol'skiy, I. D.; Piruyev, Ye. V.; Ekzemplyarskiy, V. Ya.

ORG: None

TITLE: Water-lubricated plain bearings for high-speed turbine units

SOURCE: Sudostroyeniye, no. 5, 1966, 25-30

TOPIC TAGS: hydrostatic bearing, hydrodynamic bearing, bearing material, bearing stability, bronze, corrosion resistance, cavitation, water, turbine

ABSTRACT: The authors discuss difficulties associated with the use of water-lubricated bearings in high-speed turbine units. Some of these difficulties are the low viscosity of water as compared to turbine lubricants and the difficulties of machining materials suitable for operation under conditions of high temperature and pressure. The main difficulty however is the viscosity of water which produces a very thin lubricating layer. The thickness of the layer permits additional friction by particles suspended in the water. The authors propose the use of hydrostatic bearings which ensure a sufficiently thick lubricating layer independent of lubricant viscosity. Such bearings are widely used in chemical machine building. These bearings are based on the desired principles, but still have many disadvantages. Therefore bearings were developed and tested which are called "combination bearings" incorporating both hydrostatic and

Cord 1/3

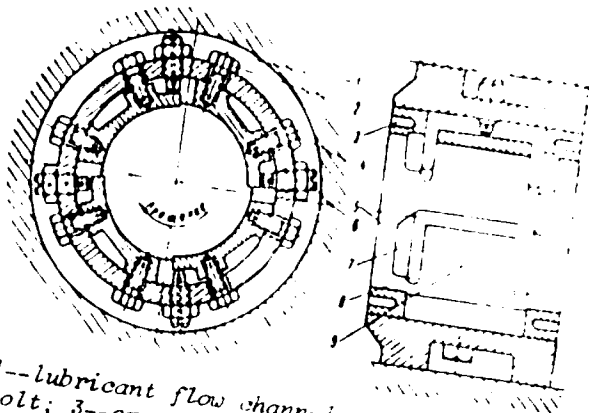
L 408 3-56
ACC NR, AP6021719

hydrodynamic principles. Laboratory test data are given together with verification of these data under operational conditions. The bearing material is the main factor in determining optimum bearing construction. Bearing materials have to satisfy the following requirements: 1. they must be highly resistant to corrosion and cavitation; 2. they must be resistant to scratches and must have good run-in characteristics at both high and low speeds; 3. they must have good wear resistance under conditions of semi-fluid friction, and in particular must be wear-resistant with respect to abrasive particles in water. As a result of several ~~years of operational experience~~, ~~of 10-15~~ bronze was chosen for the bearings. This material has certain disadvantages such as comparatively low run-in properties and a high coefficient of expansion. All bearing designs considered in this article are made of this material. Four different types of combination bearings are tested. A diagram is given showing the temperature for the internal surface of the bearing inserts. Tests show that local heating of bearings is the main source of failure. Local thermal deformations affect the inserts and reduce cooling for the heated zone. The continuation of this process causes binding between shaft and bearing. Three of the four types of bearing designs tested suffer from these defects, while the fourth type (see, figure) does not. This bearing is designed so that expansion due to heat both under normal and under emergency operating conditions does not reduce the clearance between shaft and bearing. The bearing inserts have a complex shape and are made so that the support surface is composed of four flexible elements. They are threaded in place, and in the event that fluid pressure falls, the shaft rests on the two lower lobes. Under these conditions, a wedge-shaped

Card 2/3

ACC NR: AP6021719

clearance is formed between the shaft and the section in which a hydrodynamic lifting force is set up. This enables the shaft to withstand emergency conditions of short duration. Thus the results of the study show that it is possible to develop a reliable water-lubricated bearing for high-speed turbine installations. The main problems for these conditions are ensuring the operation of the bearing under conditions of interrupted lubrication, and sufficient vibration resistance at high rpm. Of all types of bearing designs studied, the four-section lobe type is best suited for operation under conditions of water-lubrication in high-speed rotors. Orig. art. has: 6 figures, 1 table.



1--lubricant flow channel; 2--fastening bolt; 3--expansion groove; 4--strain pin; 5--band; 6--regulating bolt; 7--oil film depression; 8--groove; 9--slip surface

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 000

Cord 3/3m/p

SOURCE (If known), Given Name(s)

Country: Yugoslavia

Address:

Affiliation:

Source: Belgrade, Veterinarski glasnik, No 10, 1961, pp 799-860.

Title: "Veterinary Services of Yugoslavia in 1960."

Editors:

MIRAJLOVIC, S., Dr., Director of the Federal Administration for Veterinary
Affairs (Direktor Savezne uprave za poslove veterinarstva);

BUGARSKI, M., Executive Head (nacelnik);

VIDRIC, K., Dr.

BABUDER, G., Dr.

POPCVIC, M.

JAKSIC, D.

PETROVIC, D.

1961, v.

1 Veterinary Inspectors and
Arbitrators (Savezni veterinarski
inspektori i referenti)

PIRUZYAN, A.

Struggling for a new way of life. Obshchestv. pit. no. 5:11-12
My '61. (MIRA 14:5)

1. Ministr trgovli Armyanskoy SSR.
(Armenia -Restaurants, lunchrooms, etc.)

PIRUZYAN, A.

Trade in Soviet Armenia. Sov.torg. no.1:20-24 Ja '58. (MIRA 10:12)

1.Ministr trgovli ArmSSR.

(Armenia--Retail trade)

PIRUZYAN, A.

Fortieth anniversary of Soviet commerce in Armenia. Sov. *torg.* 34:33-36
'60. (MIRA 13:11)

1. Ministr *torgovli* Armvanskoy SSR.
(Armenia--Commerce)

PIRUZYAN, A.

Development of public food service in Armenia. Sov. tovg. 33 no.11:
31-34 N '59. (MIRA 13:2)

1. Ministr tovgovli Armyanskoy SSR.
(Armenia--Restaurants, lunchrooms, etc.)

PLUZYAN, Aram Sergeyevich

[Soviet commerce in the Armenian S.S.R.] Sovetskaia torgovlia
v Armianskoi SSR. Erevan, Armianskoe gos. izd-vo, 1961. 136 p
(MIRA 19:9)
(Armenia--Commerce)

PIRUZYAN, A.S., red.

[Food industry of Armenia] Pishchevaya promyshlennost' Armianskoi
SSR. Brevan, Armianskoe gos. izd-vo 1958. 242 p. [In Armenian].
(MIRA 11:11)

(Armenia--Food industry)

42818

S/169/62/000/010/027/071
D223/D307

AUTHORS: Karapetyan, B.K. and Piruzyan, S.A.
TITLE: Studying seismo-explosive vibrations in the Armvod-stroya Tunnel at the Lusavanskiy Sand Quarry
PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1962, 30, abstract 10.193 (Tr. Arm. in-ta stroymaterialov i sooruzh., no. 1, 1959, 53-65)

TEXT: The investigations were made in order to establish the limiting charges of explosions near the tunnel under the Lusavanskiy Sand Quarry. Three detonations -- of 120, 200 and 320 kg -- were used to generate the seismic vibrations. These vibrations were recorded by ANC (NIS) seismometers, which were mounted on different types of ground. The cited seismic accelerations at various distances from the detonation points were obtained as a result of measuring the vibrations, and spectral curves were constructed. It is noted that the curves of the cited seismic accelerations fall more steeply as the charge is increased. The magnitudes of the accelera-

Card 1/2

Studying seismo-explosive ...

S/169/62/000/010/027/071
D228/D307

tions cited were found to be 10 times less in the tunnel than on the surface. The accelerations in pumice were several times greater than those in obsidian.

[Abstracter's note: Complete translation]

Card 2/2

KARAPETYAN, B.K.; PIRUZYAN, S.A.

Study of vibrations from earthquake-like explosions in a tunnel
built by the Armenian Administration of Water Power Developments
for the Lusavanskii sand quarry. Trudy Arm. inst. stroimat. i
soor. no.1:53-65 '99. (MIRA 14:12)

(Armenia—Seismic waves)

POTEMKIN, S.A.

Was data on the re-identification of the Director of the
Dept. of Army. SSR. (1971-1972) (1971-1972)

1. Director of the Department of Army. SSR.

IRONIAN, S.A.

Determining the spectrum of the...
based on the spectral... of each...
Ser. tekhn. ark. 18 no. 4x-4-58 1-5.

1. In the...
of the... of May...

MEDVEDEV, S. V.; BUNE, V. I.; GZELISHVILI, I. A.; KARAPETTYAN, B. K.;
KATS, A. Z.; LYAMZINA, G. A.; PIRUZZYAN, S. A.; POPOV, V. V.;
SAMECOV, B. N.; SHAGINYAN, S. A.

Instructions on conducting seismic microzoning. Trudy Inst. fiz.
zem. no.22. Vop. inzh. seism. no.7 112-122 '62.

(MIRA 1:10)

(Seismology)

FIRUZYAN, S.A.

Determining the seismic properties of soils in the natural stratification of the Erivan region. Izv. AN Arm. SSR Ser. tekhn. nauk 14 no.6:25-38 '61. (MIRA 14:8)

1. Armyanskiy nauchno-issledovatel'skiy institut stroymaterialov i sooruzheniy.

NAZAROV, A.G.; KARAPETYAN, B.K.; MUSAYELYAN, A.A.; PIRUZYAN, S.A.;
SAFARYAN, A.N. [deceased]; SHAGINYAN, S.A.

Preliminary work results of the engineering seismological
detachment of the Joint Tajik Seismological Expedition in
the Stalinabad region. Izv. Otd. est. nauk AN Tadsh. SSR
no.3:11-26 '59.
(MIRA 15:5)

1. Institut seysmostoykogo stroitel'stva i seysmologii
AN Tadzhikskoy SSR, Institut stroymaterialov i sooruzheniy
AN Armyanskoy SSR i Institut stoitel'nogo dela AN Gruzinskoy
SSR.

(Stalinabad region—Seismological research)

PIR'UZYAN, S.A.

Seismic microzoning on the basis of instrumental observations.
Izv. AN Arm. SSR. Ser. tekhn. nauk 15 no.4:43-52 '62.

(MIRA 15:7)
1. Institut geofiziki i inzhenernoy seysmologii AN Armyanskoy
SSR.

(Seismometry)

SHAKHSUVARIAN, L.V.; PIRUZYAN, S.A.; PESHTMALDZHIAN, O.V.

Engineering investigation of the Bogdanovka (Madatapa Lake)
earthquake of December 8-9, 1959. Izv. AN Arm.SSR. Ser. tekhn.
nauk 14 no.1:55-66 '61. (MIRA 14:3)

1. Institut stroymaterialov i sooruzheniy Gosstroya Armyanskoy
SSR.
(Bogdanovka (Georgia)—Earthquake, 1959)

S/169/61/000/000/000/000
D228/D304

AUTHORS: Nazarov, A.G., Karapetyan, B.K., and Piruzyan, S.A.

TITLE: Seismic microzoning on an instrumental basis

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, abstract 11A166 (Aykakan SSR Gitutyunneri Akademia Zeykuystner, Dokl. AN ArmSSR, 32, no. 3, 1961, 154)

TEXT: The change in an earthquake's intensity when moving from one ground environment to another is estimated in seismic microzoning. The authors suggest that the spectrum of the given seismic accelerations should be taken as a measure of the intensity of seismic vibrations. Its values are determined on the basis of instrumental observations in different microgeologic environments. It is, thereby, necessary to observe the following requirements. The device must be placed at such a distance from each other that the influence of the expendability of seismic waves is eliminated. It is necessary to distinguish reference areas with instrumental readings.

Card 1/2

Seismic microzoning on an ...

S/169/61/000/011/001
D228/D304

to which the readings of devices situated in other microgeological zones may be compared. The values of the spectra of the given accelerations, determined in different ground environments, are divided into the magnitude for the spectrum of the given acceleration corresponding to terrain to which the force-scale of the seismic zoning map refers. [Abstractor's note: Complete translation.]

Card 2/2

PIRUZYAN, S.A.

Using the AIS-2 multiple-pendulum seismograph in recording the earthquake of February 14, 1957, in Yrivan. Izv. AN Arm.SSR. Ser.tekh.nauk 11 no.5:72-73 '58. (MIRA 11:11)

1. Institut stroymaterialov i sooruzheniy Ministerstva stroitel'stva ArmSSR.
(Yrivan--Earthquake, 1957) (Seismometers)

NAZAROV, A.G., akademik; KARAPETYAN, B.K.; PIRUZYAN, S.A.

Establishing seismic microdistricts on the basis of instrumental data. Dokl.AN Arm.SSR 32 no.3:149-154 '61. (MIRA 14:5)

1. Institut stroitel'nykh materialov i sooruzheniy Gosstroya Armyanskoy SSR. 2. Akademiya nauk Armyanskoy SSR (for Nazarov). (Seismology)

NAZAROV, A.G.; KARAPETYAN, B.K.; PIRUZYAN, S.A.

Method for the approximate détermination of seismic districts. Izv.
AN Arm. SSR. Ser.tekh.nauk 11 No.2:43-46 '61. (MIRA 14:3)

1. Armyanskiy institut stroymaterialov i sooruzheniy.
(Earthquakes)

0107/61/014/002/001/001
0007/D30*

AUTHORS: Nazarov, A.G., Karapetyan, B.K., and Piruzyan, S.A.

TITLE: A method for approximate seismic micro-division into districts

PERIODICAL: Izvestiya akademii nauk Armjanskoy^{SSR}, Seriya tekhnicheskikh nauk, v. 14, no. 2, 1961, 43-45

TEXT: The present material was presented to the Institut fiziki zemli AN SSSR (Institute of Earth Physics, AS USSR), for drawing up instructions on seismic micro-division into districts. In order to accumulate factual, comparative data about earthquake intensities in various local conditions, the authors propose carrying out an approximate seismic micro-division of inhabited and building areas in the manner indicated, since it is impossible to solve this question with instrumental surveys in the experience of A.G. Nazarov, B.K. Karapetyan and S.A. Piruzyan (Ref. 1: Seysmicheskoe

Card 1/8

S/173/61/014/002,001,001
D202/D305

A method for approximate ...

mikrorayonirovaniye na instrumental'noy osnove (Seismic Micro-division into Districts by Surveying with Instruments) Doklady AN ArmSSR, Yerevan, 1961 (in print). Geological and geophysical investigations carried out in the areas /Abstractor's note: These not given/ subjected to these microdivisions will result in obtaining data about the velocities of seismic longitudinal waves in the various soils encountered. A relative seismicity of individual sections of the territory is then determined, according to their basic geological, hydrogeological and geomorphological characteristics. These local characteristics are determined by introducing the following coefficients: k_g - taking into account the type of ground in a dry state in the base of the building, k_v - taking into account the ground water level, k_p - taking into account the topographical relief of the area. The overall coefficient k which will consider the variation of the earthquake intensity in various local conditions will then be the product of the established

Card 2/8

S. 127/61/014/002/001/001
1000 D305

A method for approximating ...

coefficients:

$$k = k_s + k_g + k_r$$

Multiplying the seismic building coefficient k_s (ref. 3: Norms and pravila stroitel'stva v seysmicheskikh ray onakh SSSR (Norms and Regulations for Construction in Seismic Regions of the USSR), (SN-8-57), M., 1957) by this new coefficient k , one obtains a coefficient of seismicity k'_s for the zones considered: $k'_s = k \cdot k_s$ (2)

To establish approximately the coefficient k_g which refers to the type of ground in the zone considered, the following formula is proposed, based on the principle of conservation of seismic energy flux, not accounting for reflection and dispersion in the parts overlying the hypocentrum: ✓

$$k_g = \sqrt{\frac{\rho_s v_s}{\rho v}}$$

where ρ_s = density of the ground at the initial point; v_s = velo-

Card 3/5

S/173/61/014/000, 001, 002
D001/D305

A method for approximate ...

city of the seismic waves (longitudinal at the initial point; ρ = density of the ground at the point considered; v = velocity of seismic waves (longitudinal) at the point considered. Ground densities and velocities of the seismic waves are determined by measurements in the field or are ascertained from data in 1.1. Gurvich (Ref. 4: Seysmorarveika (Seismic Prospecting), M. 1954). From the analyses of results obtained from observations of earthquakes and explosions by multipendulum seismometers. Table 1 was prepared, in which approximate values of ρ for various types of soil are given in relation to the clay-sandy loam considered as a "unity type" of soil on the map of seismic divisions of Soviet territory (Ref. 3: Op.cit.) and S.V. Melvelev (Ref. 14: Seysmicheskoye rayonirovaniye territorii SSSR (Seismic Division into Districts of the Territory of the USSR), Tr. Instituta Fiziki Zemli, No. 1 (163), M., 1958).

Card 4/5

A method for determining

100 / 014 / 007 001 001
100 / 010

Table 1 The average values of the physical and mechanical properties of the

Type of rock	Sp
Granite	0.80
Tuff	0.70
Massive limestone (compact)	0.80
Conglomerate (cemented)	0.80
Conglomerate	0.80
Compact sandstone	0.80
Fractured basalt	0.70
Marls, Gypsum	0.70
Clay	0.80
Clay (sandy loam)	1.00
Loess (Over a thick layer of conglomerate)	1.10
Sand	1.20
Contemporary (modern)	1.40
Embankments	1.50

Card 1/2

S. 13/61/014, 005, 001, 001
D'00, D'00

A method for ...

average rigidity. Consideration of the ... to the ground relief may be ... coefficient k_p -- which takes into ... relief -- with the following formula:

$$k_p = 1 + \tan^2 \alpha$$

where α is the slope of the ground ... (When $\alpha = 45^\circ - 60^\circ$, k_p should be accepted as equal to 2. When the slopes consist of soft, contemporary sediments, the erection of principal buildings should be forbidden. When non-elastic buildings are erected on isolated rock remnants, in narrow waterheds ... edges of cliffs there is always a possibility of an increase in the seismic effect. It is not recommended building on slopes composed of alluvial materials especially when the slope exceeds 30° . There are reliable and references: 1) Soviet-bloc and 2) non-Soviet-bloc. The references in the English-language publication reads as follows: B. Gutenberg "Effects of Ground Motion ...

Card 7/4

A method for measuring ...

S/173/61/014/002/001/00.
DPO/DPO

Earthquakes". Trans. Am. Geophys. Union, 37, 1956; and E. Gutenberg, "Effects of Ground on Earthquake Motion." Bulletin of the Seismological Society of America, Vol. 47, No. 3, 1957. Association's note: This is essentially a complete translation. ✓

ASSOCIATION: Armyanskii institut stroymaterialov i stroyeniya
(Armenian Institute of Building Materials and Construction)

Card 8/8

ACC NR: AP024027

SOURCE CODE: UR/0252/66/042/001/0041/0046

AUTHOR: Piruzyan, S. A.

ORG: Institute of Geophysics and Engineering Seismology, Academy of Sciences,
Armenian SSR (Institut geofiziki i inzhenernoy seysmologii Akademii nauk Armyanskoy
SSR)

TITLE: On the question of so-called common quakes and simultaneous earthquakes

SOURCE: AN ArmSSR. Doklady, v. 42, no. 1, 1966, 41-46

TOPIC DESC: seismology, seismic wave, earthquake, tectonics

ABSTRACT: A common quake is defined as a system of almost simultaneous earthquakes which has, besides the principal focus at the instant of the earthquake, also a clearly pronounced secondary foci. These earthquakes were first described by L. A. Vardapetian (Trudy Seysmologicheskogo instituta AN SSSR no. 64, M.-L, 1935). In view of differences of opinion in the literature concerning the cause of such quakes, the author reviews historical records of a number of earthquakes in the Caucasus and its vicinity, where the occurrence of simultaneous earthquakes is clearly indicated by the evidence. On the basis of these data, he proposes that such quakes can be caused either by the production of secondary foci by the primary shock at some points of a seismogenic fractures that are coupled to one another and constitute characteristic disjunctive nodes. This report was presented by Corresponding member AN ArmSSR A. A. Gabrielyan 27 April 1965. Orig. art. has: 1 figure.

SUB CODE: 08/

SUBM DATE: 00/

ORIG REF: 010/

OTH REF: 001

Card 1/1 *hah*

ACC NR. 17001-109

ORIGIN CODE: UR/0173/65/18/ 17 04/0000

AUTHOR: Tiruzyan, S.A.

ORG: Institute of Geophysics and Engineering Seismology, AN ArmSSR (Institut geofiziki i inzhenerney seysmologii)

TITLE: A method for the determination of reduced seismic accelerations on the basis of earthquake seismograms

SOURCE: AN ArmSSR. Izvestiya. Seriya tekhnicheskikh nauk, v. 18, no.5, 1965, 54-58

TOPIC TAGS: seismology, seismic wave, seismogram analysis, seismic modeling, earthquake, earthquake resistant structure, earthquake intensity analysis

ABSTRACT: After a review of various methods used for the seismic evaluation of earthquakes, the author outlines a method for the determination of the reduced seismic acceleration spectrum, directly from the earthquake seismograms. The reduced seismic acceleration spectrum is defined as the function representing the extreme values of accelerations sustained by a point unit mass of a linear oscillator with its own period T , and a damping constant α , under the action of a given earthquake. Thus the force, S , on a mass m would be represented by the expression

$$S = m \cdot Z(T, \alpha, t) \quad (1)$$

The method is based upon a linear oscillator model in form of a vertical massless beam with a concentrated mass at one end, a given period of free oscillations T and a given damping constant α . The seismogram represents the beam base motion as $y_0(t)$.

Card 1/2

ACC NR: AP6013109

The reduced spectrum is defined as

$$Z(T, \alpha, t) = (2\pi/T)^2 \cdot y(t, \alpha) \quad (2)$$

where $y(t, \alpha)$ - is the

motion of the beam in time defined, with $\omega = 2\pi/T$ and α - a parameter, by:

$$\psi(t, \alpha) - \alpha \omega y'(t, \alpha) - \omega^2 y(t, \alpha) = -\ddot{y}(t) \quad (3)$$

To avoid double differentiation of the seismogram to obtain $\ddot{y}(t)$, the author integrates (3) twice. By the applying the Cauchy theorem to the third left-hand member, (3) is represented as a Volterra integral equation of the second kind, amenable to a numerical solution on a computer. This approach opens the possibility for an analytical evaluation of earthquake intensities by the reduced spectra. The method is expected to yield precise results for long period ground oscillations. Errors may increase for short period oscillations. Orig. art. has 8 formulas.

SUB CODE: 08, 13/

SURM DATE: 20May05/

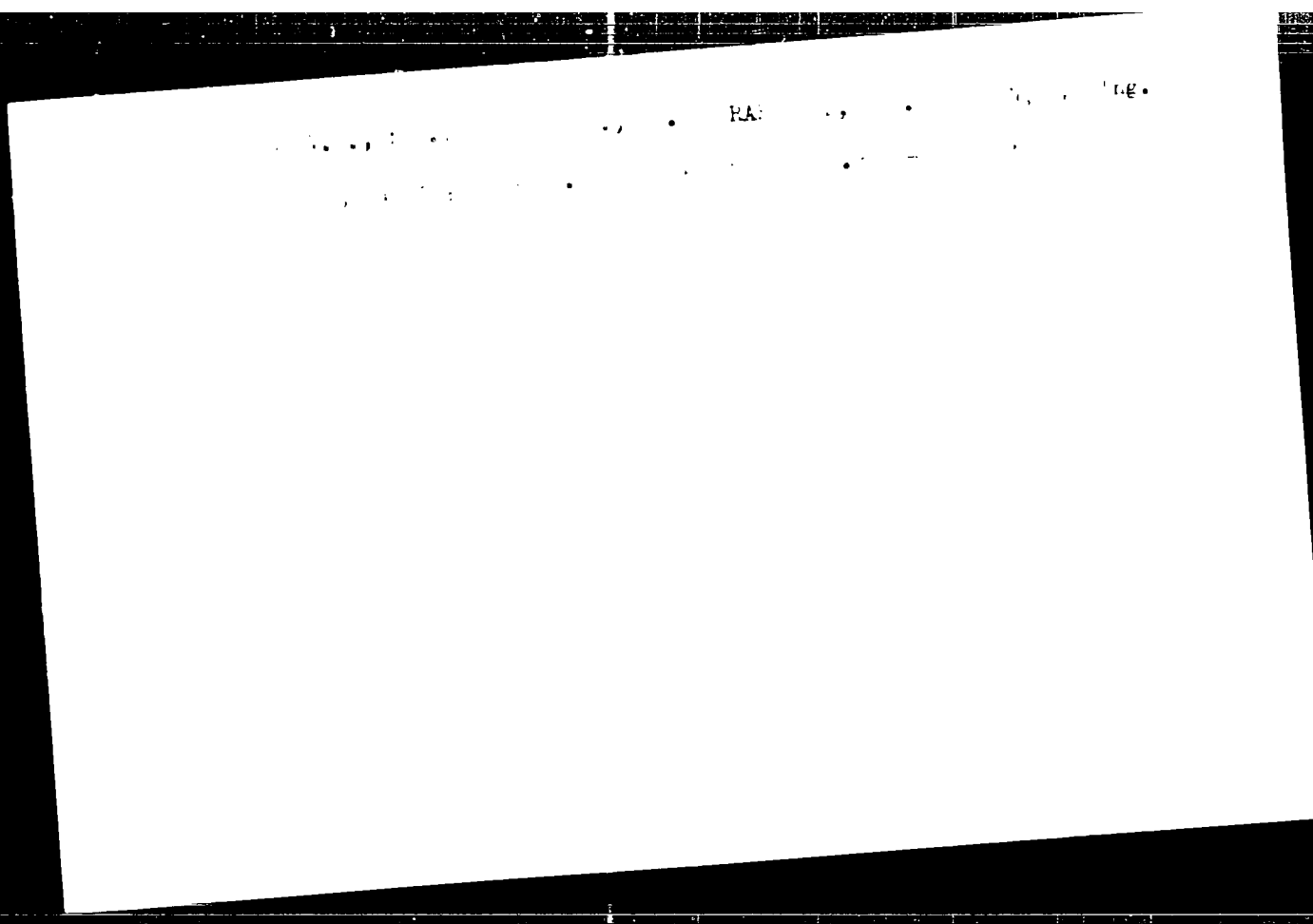
OTIG REF: 012/

OTH REF: 002

Card 2/2

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001341020004-6



APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001341020004-6"

PINVAN, M., Ing.

Water for ancient Rome. St si reh due 16 no. 6:38 Je '64.

PIRUZYAN, S.A.

Effect of the microgeology on the value of shaking force according to data of the Geghechkori earthquake in 1957. Izv. AN Arm. SSR. Ser. tekhn. nauk 10 no. 6: 67-74 '57. (MIRA 11:2)

1. Institut stroymaterialov i sooruzheniy AN Arm. SSR.
(Seismology--Observations)
(Geghechkori--Earthquake, 1957)

PIRUZYAN, S. S.

Cand Agr Sci - (diss) "Effect of salting of soil on corn in various development phases." Tbilisi, 1961. 22 pp; (Ministry of Agriculture Georgian SSR, Georgian Order of Labor Red Banner Agricultural Inst); 150 copies; price not given; (KL, 5-61 sur, 198)

PIRUZYAN, S.S.

Effect of salinization on the growth and development of corn [with
summary in English]. Pochvovedenie no.2:91-96 P '59.

(MIRA 12:3)

1. Armyanskiy sel'skokhozyaystvennyy institut, g. Yerevan.
(Corn (Maize)) (Alkali lands)

PIRVERDIYEV, A.B., dotsent

Infantilism combined with hepatosplenomegaly and cirrhosis of the liver against a background of malarial attacks. Azerb. med.zhur. no.4:66-71 Ap '59. (MIRA 12:6)

1. Iz 1-y kafedry propedevtiki vnutrennikh bolezney (zav. - prof.O.M.Baisheva-Zeynalova) Azerbaydzhanskogo gosudarstvennogo meditsinskogo instituta im. N.Narimanova (direktor - zasluzh. deyatel' nauki prof.B.A.Eyvazov).

(INFANTILISM) (LIVER--DISEASES) (SPLEEN--DISEASES) (MALARIA)

PIRVERDIYEV, A.B., dots.

Changes in leucopoiesis and erythropoiesis in pulmonary tuberculosis.
Azerb.med.zhur. no.4:87-91 Ap '58 (MIRA 11:7)

1. Iz Kafedry propedevtiki vnutrennikh bolezney (zav. - prof.
G. Kh. Baishava-Zeynalova) Azerbaydzhanskogo gosudarstvennogo
meditsinskogo instituta im. N.Narimanova.
(TUBERCULOSIS)
(BLOOD CELLS)

PIRVERDIYEVA, B.Z.; ALIMIRZOYEVA, Sh.A.

Effect of sulfanilamide, sulfapyridine and sulfazole on the intestinal absorption of amino acids. Trudy Vses.ob-va fiziol.biokhim. i farm. Trudy Vses.ob-va fiziol.biokhim. i farm. 2:214 '54.(MLRA 8:7)

1. Kafedra biokhimii Azerbaydzhanskogo meditsinskogo instituta.
(INTESTINES, physiology,
amino acids absorp., eff. of various sulfonamides)
(AMINO ACIDS, metabolism,
intestinal absorp., eff. of various sulfonamides)
(SULFONAMIDES, effects,
on intestinal absorp. of amino acids)

PIRVEDYAN, A. N.

USSR/Petroleum - well drilling
Pumps

"The Problem of Increasing the Durability of Deep Pumps," A. N. PIRVEDYAN, A. N.
PIRVEDYAN (City of Baku), 6 pp

"Neftyanoye Khozyaystvo" Vol. 1, No. 6

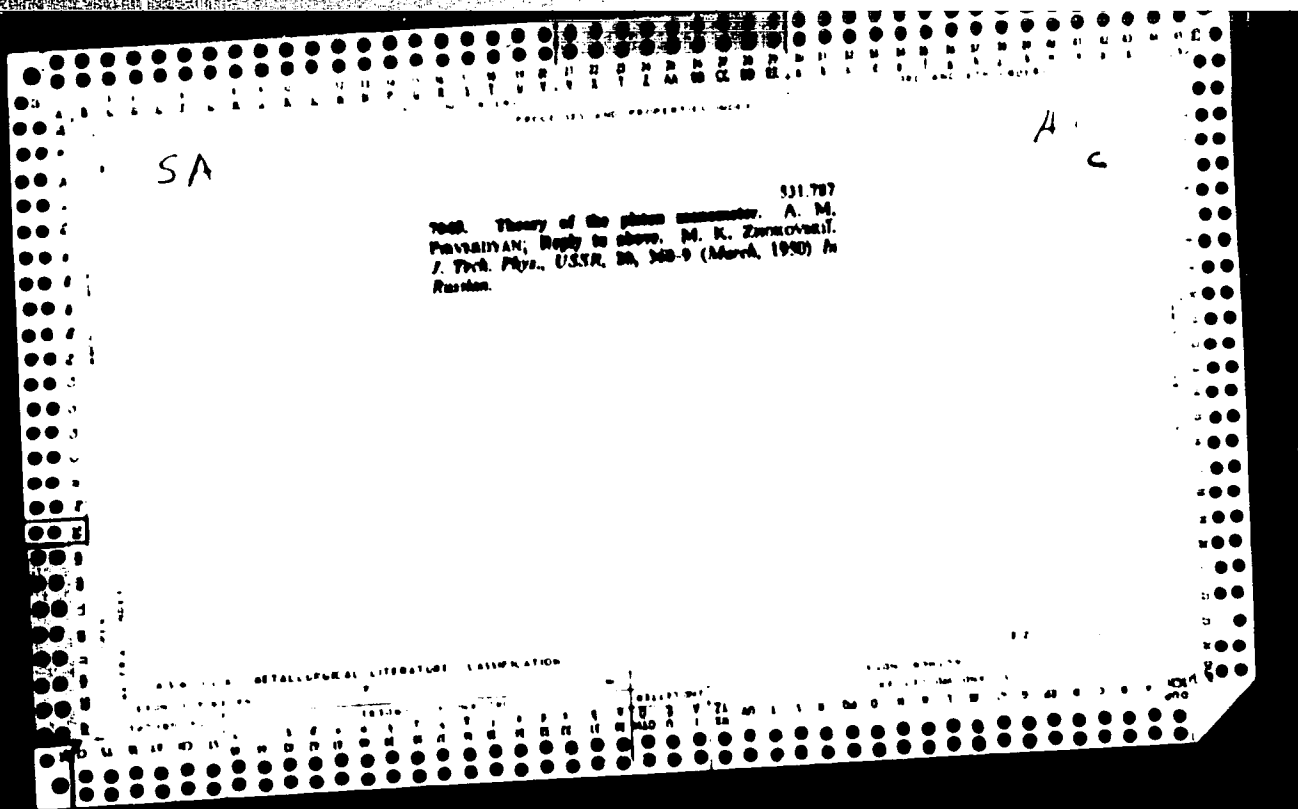
Problem of underground repair and exchange of valves. The elimination of breakdowns.
Tables and graphs showing relationships between running time, leakage, valve operation,
etc.

DA 9712

1. The first part of the document is a list of the names of the persons who were present at the meeting.

2. The second part of the document is a list of the names of the persons who were present at the meeting.

3. The third part of the document is a list of the names of the persons who were present at the meeting.



PIRVERDYAN, A. M.

USSR/Mathematics - Turbulence

Jan/Feb 52

"The Motion of a Drop of Compressible Fluid in a Porous Medium According to the Law of Turbulence,"
A. M. Pirverdyan, Baku

"Prik Matemat i Mekh" Vol XVI, No 1, pp 119, 120

Derives subject eq and solves it for case of one-dimensional turbulent motion in semi-infinite layer for const pressure at exit. Soln may be useful for evaluation by approx methods.

203767

PIRVERDYAN, A. M. , BAKU

USSR/Mathematics - Hydraulics

Mar/Apr 52

"Motion of Ground Water in Slightly Inclined Layers,"
A. M. Pirverdyan, Baku

"Prikl Matemat i Mekh" Vol XVI, No 2, pp 223-226

Problem of motion of boundary between petroleum
and water is mostly solved in approximation and
leads to errors. Author analyzes most convenient
location of wells and computes limits of its ex-
ploitation. Received 13 Nov 51.

209T67

PIRVERDIAN, A. M.

USSR/Mathematics - Filtration

Nov/Dec 52

"Motion of a Two-Phase Incompressible Mixture in a Porous Medium," A. M. Pirverdyan, Baku

"Priklad Matemat i Mekhan" Vol 16, No 6, pp 711-714

Considers a one-dimensional motion of a two-phase incompressible mixture under the following conditions: at the initial moment of exploitation of a banded oil structure divided into 3 zones (horizontal band), water is in zone 1, water-oil mixture in 2, and oil in 3, with the direction of flow from water to oil. Thanks L. A. Galin for his perusal of the work. Submitted 30 Apr 52.

241765

PIRVERDIYAN, Aleksandr Mikhaylovich, doktor tekhnicheskikh nauk;

ADONIN, Anatoliy Nikiforovich, kandidat tekhnicheskikh nauk;

LISIKYAN, K.A., redaktor; AL'TMAN, T.B., redaktor.

[Problems in the hydraulics and efficient operation of deep-well pumps] Voprosy gidravliki i rabotosposobnosti glubin-nogo nasosa. Baku, Azerbaidzhanskoe gos.isd-vo neftianoi i nauchno-tekhn.lit-ry, 1955. 191 p. [Microfilm] (MLRA 9:1)
(Pumping machinery)

IVANOVA, E.S.; PIRVERDIAN, A.M.

Calculating the boundary shift of the oil-water contact in oil
sands. Izv.AN Azer.SSR no.10:41-44 0 '55. (MLRA 9:4)
(Petroleum geology)

SOV/124-57-9-10667

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 9, p 119 (USSR)

AUTHOR: Pirverdyan, A. M.

TITLE: On the Flow of a Liquid Toward a Series of Wells Arranged in a
Straight line (O pritoke zhidkosti k pryamolineynoy tsepoche skvazhin)

PERIODICAL: Tr Azerb nauchnoy i tekhnicheskoy teorii i praktiki, 1956, Nr 3, pp 94-96

ABSTRACT: A simple derivation of the well-known formula by I. A. Charnyy
permitting a determination of the influx of oil to an infinite series of
wells operating under identical conditions and situated on a semi-
infinite reservoir with a rectilinear influence contour
V. A. Karpychev

Card 1/1

SOV 124-58-1-906

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p. 2. (USSR)

AUTHOR: Pirverdyan, A. M.

TITLE: - Seepage Toward a Horizontal Taphole or Well (Fil'tratsiya k gorizonta'l'noy skvazhine)

PERIODICAL: Tr. Azerb. nauch. in-ta po dobyche nefti, 1956, Nr 3, pp 97-105

ABSTRACT: An examination of the plane problem of the seepage of an incompressible liquid in a semi infinite strip shaped aquifer tapped by a generically oriented horizontal taphole. The cap and base of the aquifer are impervious, the influence contour is perpendicular to the cap and base. Utilizing the method of mapping a sink relative to the cap and the base and further mapping the infinite doubly coperiodic chain of sinks obtaining therefrom with respect to a straight line that coincides with the influence contour, the author finds the pressure distribution evoked by a point sink. Then, by satisfying the boundary conditions for the pressure along the influence contour and at one point of the well bottom (having a finite radius), the author finds the yield of the perfect well ("perfect", in this instance, refers to unimpeded and uniform permeability

Card 1/2

SOV 124-58-1-906

Seepage Toward a Horizontal Taphole or Well

of the walls of the taphole or well, Transl. Ed. Note). The case of an imperfect well is examined, also the case of anisotropic permeability. For each of the three cases comparisons are made of the yields of wells located near the top of an aquifer and midway between the cap and the base. The author concludes that an off-midway location of a well does not influence the yield to a great extent.

A. M. Suponitskiy

Card 2 2

BABICH, E.S.; FIRVEFDYAN, A.M.

Partial case of fluid flow in a reservoir with a slightly permeable roof (bottom). Izv. vys. uch. zav.; neft' i gaz 5 no.9:89-92 '62. (MIRA 17:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova
i Azerbaydzhanskiy nauchno-issledovatel'skiy institut
mnogoletnikh nasazhdeniy.

13

124 58 9 10144

Translation from: Referativnyi zhurnal Mekhanika 1958 Nr 9 p 10 (USSR)

AUTHORS: Pirverdyan, A. M. Danelyan, M. G.

TITLE: Hydrodynamic Analysis of Selective Layer-wise Injection
(Gidrodinamicheskiy analiz razdel'nogo nagnetaniya)

PERIODICAL: Tr. Azerb. nauch.-issled. tip. dobyche nefti 1958 Nr 5
pp 139-147

ABSTRACT: An examination of problems arising relative to the advisability of selective layer-wise injection into a reservoir. The reservoir is imagined to be divided into a number of isolated layers called "stories". The examination is focused on the linear motion of the water-oil interface in the reservoir. The equation of motion of the water-oil interface is derived, also an equation for the magnitude of the momentum corresponding to the pressure drop prevailing at the time of flooding, and an equation for the determination of the volume of the flooded portion of the reservoir at the end of the water-free period of exploitation. Displacement calculations are adduced for injection throughout the full thickness of the reservoir and injection in one, two, and three stories.

Card 1 2 The results of the calculations are shown in the form of graphs.

124-58-9-10144

Hydrodynamic Analysis of Selective Layer-wise Injection

which characterize the relationships between the nominal oil yield coefficient and the number of stories used for the water-free period. It was assumed therein that the oil is fully ejected from the pores. The graphs are drawn for a specified initial position of the interface and a constant value for k — the ratio between the permeability of the displacement zone and the permeability of the water zone. The graphs are supplemented by tables of the impulse at the beginning of the flooding of the reservoir. From their analysis of the graphs the authors arrive at the following conclusions: 1) The oil-yield coefficient, in practice, increases with an increase in the number of injection stories up to three. It is recommended that injection be performed in not more than three stories. 2) With increasing viscosity of the oil the nominal oil-yield coefficient for the water-free period decreases. 3) The nominal oil-yield coefficient depends on the degree of the decrease of the permeability coefficient relative to water in the displacement zone, i.e., on k ; the smaller k , the greater the nominal oil yield coefficient. 4) It is shown that selective level-wise injection is more advisable in gently sloping reservoirs than in steeply sloping ones. 5) The control of the even motion of the water in each substratum must be accomplished by maintaining different pressure periods in each level, which is done by maintaining different injection pressures in the various stories.

Hydrology--86.08 2. Initial waterways--86.08 10.01
Card 2 2 Characteristic of water--86.08 10.01 I. D. Umrikhin

Translation from: Referativnyy zhurnal. Mekhanika, 1958, No. 1, p. 122 (USSR)
SOV 124-58-1-199

AUTHOR: Pirverdyan, A. M.

TITLE: Calculation of the Displacement of an Oil Bank When Water is
Injected Within the Oil Bank Contour. Raschet peremeshcheniya
kontura neftenosnosti pri vnutri konturnom zaflozhenii.

PERIODICAL: Dokl. AN AzerbSSR, 1958, Vol. 12, No. 10, pp. 701-707.

ABSTRACT: The author proposes an approximate method for the calculation of the displacement of the water-oil contact interface in a sloping reservoir layer tapped by a chain of producing and a chain of injection wells wherein the latter is located in the head region of the reservoir. It is assumed that the flow follows the stratification while the water-oil contact interface within the limit of some strip lying between the injection chain and the producing chain assumes the shape of a straight line, parallel to the chain of wells, which advances without suffering any planform deformation. Leakage beyond the influence contour is investigated. Formulas are also added for the calculation of the displacement of an oil bank in vertically shaped occurrences.

Card 1-1

V. I. Dargid

GUKASOV, N.A.; PIRVERDIYAN, A.M.

Approximate formula for determining the hydrostatic pressure of a well.
Neft.khoz.33 [1.e.34] no.9:20-21 8 '56. (MIRA 9:10)
(Petroleum engineering)

AMBARTSUMYAN, A.P.; BRISK, M.I.; LISTENGARTEN, B.M.; PIRVERDIAN, A.M.

Effect of petroleum viscosity on the effectiveness of flooding.
Azerb.neft.khos. 35 no.7:18-22 J1 '56. (MLSA 9:12)
(Oil field flooding)

AMBARTSUMYAN, A.P.; BRISK, M.I.; LISTENGARTEN, B.M.; ~~PIRVKRDYAN, A.M.~~

Effect of petroleum viscosity on the effectiveness of water
flooding. Azerb.neft.khoz. 35 no.8:19-22 Ag '56. (MLBA 9:10)

(Oil field flooding)

SOV 124 58-2 2022

Translation from: Referativnyi zhurnal. Mekhanika, 1958, Nr 2, p 75 (USSR)

AUTHORS: Pirverdyan, A. M. Ambartsumyan, I. A. P.

TITLE: Hydrodynamic Analysis of Some Methods of Reservoir Management
(Gidrodinamicheskiy analiz nekotorykh metodov vozdeystviya na plasty)

PERIODICAL: Izv. AN AzSSR, 1957, Nr 2, pp 15-22

ABSTRACT: An examination of problems relative to the seepage of liquids in a reservoir stratum with straight-line and annular batteries of injection wells and producing wells in conditions of uninterrupted pressure injection, wherein the injection is performed in accordance with the intra-reservoir as well as the extra-reservoir (contour) water-flooding plan. The method is based on the method of equivalent seepage resistances [ref. Charnyy, I. A., Osnovy podzemnoy gidravliki (Fundamentals of Underground Hydraulics), Gostoptekhnizdat, 1956]. The following cases are analyzed: a) Assuming a reservoir stratum bounded on three sides by impervious boundaries, in rows of producing wells and one row of injection wells are laid out. The injection is set up according to the extra-reservoir

SOV 124-58 2 1972

Hydrodynamic Analysis of Some Methods of Reservoir Management

(contour) plan, as well as on the side of the impervious boundary. Assuming the pressure at the wells and at the influence contour to be known, the authors set up a system of equations from which the yields of the producing rows, the flow rate consumed by the injection rows, and the magnitude of the liquid leakage beyond the reservoir are found for either method of injection; b) a detailed investigation is made of the cases when $m = 2$ and $m = 1$; c) the authors note that the structure of the yield formulas and leakage formulas for annular batteries coincides with the structure of the corresponding formulas for the straight rows and that the central flooding pattern is analogous to flooding along the side of the impervious boundary. For the case of $m = 1$, the subject of the injection pressures is examined further.

V. A. Karpichev

Card 2 2

PIRYERDYAN A.M.; BABICH, E.S.; BABICH, Yu.A.

Approximate method for calculating fluid flow toward a circular array of wells operating under original pressure. *Izv. vys. ucheb. zav.; neft' i gaz* no.6:55-60 '58. (MIRA 11:9)

1. Azerbaydzhanskiy industrial'nyy institut im. M. Azizbekova, Azerbaydzhanskiy nauchno-issledovatel'skiy institut dobychi nefti i gaza i AN Azerbaydzhanskoy SSR.
(Oil field flooding)

SOV/24-58-11 23/58

AUTHOR: Pirverdyan A. M. (Baku)

TITLE: On the Filtration of Liquids Through Sediments in a Well (fil'tratsii zhidkosti k zallennoy skvazhine)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 7, pp 123-126 (USSR)

ABSTRACT: A case is considered where a filter is partly or wholly contaminated by the sediments (sand, etc) filling a well up to the height h (figure on p 124). The condition of the uniform anisotropy of the layer of liquid is defined by $k_r/k_z = \infty$ or $k_z = 0$ (k_z, k_r - permeability in z and r directions). The discharge of the liquid from the sides of the well which are dz high, is determined by the formula (1), where η - viscosity, R_K, R_C - radius of supply and the well profiles respectively, $p_K(z)$ - pressure at the boundary of flow, p - pressure in the well at the height z . The formula (1) is specially accurate for $k_z = 0$. In the case of a contaminated filter, the pressure p is not known and should be determined. This can be done by the application of the Darcy formula (3) for the part of the well filled with sediments (f_c - cross-section of the well). From Eqs (1) and

Card 1/2

SOV/24-58-7.23.24

On the Filtration of Liquids Through Sediments in a Well

(3) the expression (4) can be derived which, after differentiation, becomes Eq (5). The pressure distribution can be defined as Eq (6) which is substituted into Eq (5) in order to find the expression (7). The discharge of the liquid is found from Eq (8), which gives sufficiently accurate results in the case of anisotropy. When the pressure, expressed by Eq (6) is substituted into Eq (4) the formulae (9) and (10) are obtained which in their final form, are defined as Eqs (23) and (24). When the discharge from a number of layers is required with $p_k(z) - p = \phi(z)$ for each layer then Eq (4) can be written as Eq (25) from which the function $p(z)$ is found (p. 126). There is 1 figure and there are 10 Soviet references.

SUBMITTED: December 20, 1956

Card 2/2

FIRVERDYAN, A.M.

Fluid flow from one horizon to another. Izv. vys. ucheb. zav.;
neft i gas no.8:59-61 '58. (MIRA 11:10)

1. Azerbaydzhanskiy industrial'nyy institut im. M. Azisbekova.
(Hydraulics)

ABASOV, M.T.; BABANLY, V.Yu.; DZHALILOV, K.N.; PIRVARDYAN, A.M.

Effect of waterproof cement barrier on the productivity of wells.
Azerb. neft. khoz. 37 no.2:29-32 P '58. (MIRA 11:6)
(Oil field brines)

OrKIN, Kuz'ma Georgiyevich; KUCHINSKIY, Petr Kazemirovich; ~~PIRVERDYAN,~~
A.M., prof., retsenzent; SAVINA, Z.A., vedushchiy red.;
FEDOTOVA, I.J., tekhn.red.

[Solving oil production problems and designing oil field equipment]
Raschet v tekhnologii i tekhnike dobychi nefi. Moskva, Is.
nauchno-tekhn.izd-vo nefi. i gorno-toplivnoi lit-ry, 1959. 385 p.
(MIRA 12:12)

(Oil fields--Production methods)

MIRZADZHANZADE, Azad Khalil ogly, prof., doktor tekhn.nauk; PIRVERDYAN,
A.M., prof., doktor tekhn.nauk, red.

[Hydrodynamics of viscoplastic and viscous fluids in connection with
oil field production methods] Voprosy gidrodinamiki viszko-plastich-
nykh i viazkikh zhidkosti v primeneni k neftedobyche. Baku, Azer-
baidzhanskoe gos.izd-vo nef. i nauchno-tekhn.lit-ry, 1959. 409 p.
(MIRA 1):1)

(Hydraulics)

PIRVERDYAN, A.M.; GUKASOV, N.A.

Turbulent flow of liquid in a pipe with a circular cross-section.
Dokl.AN Azerb.SSR 15 no.6:473-477 '59. (MIRA 12:9)

1. Predstavleno akademikom AN Azerbaydzhanskoy SSR Z.I.Khalilovym.
(Hydraulics)

L 26461-66

ACC NR: AP6017380

SOURCE CODE: UR/0230/65/000/011/0017/0019

AUTHOR: Abdulragimov, A. I. (Engineer); Vlasov, S. N. (Engineer); Pirverdyan, A. M.
(Doctor of technical sciences); Shvarts, Ya. A. (Doctor of technical sciences);
Listengarten, L. B. (Engineer); Yakubov, Yu. G. (Engineer)
ORG: / Abdulragimov, Vlasov / Baktomel'stroy; Pirverdyan, Shvarts, Listengarten
Amil M; Yakubov Bakmetroproyekt

TITLE: Construction of tunnels in soils with high hydrostatic pressure

SOURCE: Transportnoye stroitel'stvo, no. 11, 1965, 17-19

TOPIC TAGS: railway tunnel, construction, hydrostatic pressure

ABSTRACT: Part of the Baku subway system had to be passed through fine-grained sandy loam with underground water pressure of over 4 atm. Experiments showed that continuous out-pumping could lower the water table somewhat in the area of the operations. After analysing several plans, it was decided that 43 wells would be dug, 27 in an outer ring, 16 in an inner ring, to lower the water pressure in the work area; as the tunnel was dug under compressed air, the wells were systematically checked and freed of filtered air. The pressure in the work tunnels was 1.5-1.7 atm. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 13 / SUBM DATE: none

Card 1/1 PB

ABDULRAGIMOV, A.I., inzh.; VLASOV, S.N., inzh.; PIRVERDYAN, A.M.,
doktor tekhn. nauk; SHVARTS, Ya.A., doktor tekhn. nauk;
LISTENGARTEN, L.B., inzh.; YAKUBOV, Yu.G., inzh.

Practices in building tunnels in soil with great hydrostatic
pressure. Transp. stroi. 15 no.11:17-19 N '65.

(MIRA 1965)

1. Baktonnel'stroy (for Abdulragimov, Vlasov). 2. Azerbaydzhan
nauchno-issledovatel'skiy institut po dobyche nefti (for
Shvarts, Listengarten). 3. Bakmetroproyekt (for Yakubov).

CHYASOV, N.A.; ZEMERNYI, G.M.

Determining presence of weapons - nuclear file to establish fact.
Shorthand: tekk.inform. = tech.inform., tekk.inform. det. =
tech. info. det. (MIRA: P)

1. The first part of the report

2. The second part of the report

3. The third part of the report

4. The fourth part of the report

ALIBEKOV, B.I.; LISTENGARTEN, L.B.; PIRVERDYAN, A.M.

Pouring degassed liquid to combat the harmful effect of gas
on the operation of a sinking centrifugal electric pump.

Izv. vys. ucheb. zav.; nef't' i gaz 6 no.8:51-55 '63.

(MIRA 17:6)

1. Azerbaydzhanskii institut nef'ti i khimii imeni M. Azizbekova,
Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche
nefti i nef'tepromyslovoye upravleniye "Leninneft'."

GUKASOV, N.A.; PIRVERDYAN, A.M.

Concerning the article "Determination of the change in hydro-
dynamic pressure on hole walls when lowering the drilling tool
and casing." Izv.vys.ucheb.zav.; neft' i gaz 6 no.9:111-112 '63.
(MIRA 17:2)

AMBARTSUMYAN, A.P.; MAMEDOV, E.A.; NIKITIN, P.I.; PIRVERDYAN, A.M.;
SAMEDOV, F.I.

Analysis of the water encroachment of pools of the Sub-Kimarki
series in the southwestern wing of the Neftyanneye Kasni deposit
in edge water flooding. Izv. AN Azerb.SSR. Ser.geol.-geog.nauk 1
no.3:3-8 '63. (MIRA 16:11)

AZIMOV, B.A.; AMBARTSUMYAN, A.P.; BABICH, Yu.A.; BABICH, E.S.; GASANOVA,
S.A.; GUKASOVA, Ye.K.; KUTUZOV, A.I.; MAMEDOV, G.A.;
PIRVERDYAN, A.M.

Additional data on the problems of the development of the series
"break" in the Neftyanyye Kamni field obtained by electric
modeling methods. Azerb.neft.khoz. 41 no.8:26-29 Ag '62.
(MIRA 16:1)

(Neftyanyye Kamni region—Oil well drilling, Submarine)
(Geological modeling)

PIRVERDYAN, A.M. (Baku)

Evaluating some approximate solutions of problems of nonstationary percolation. Izv. AN SSSR. Otd. tekhn. nauk. Mekh. i mashinostr. no. 5:46-50
S-O '62. (MIRA 15:10)

(Percolation)

GUKASOV, N.A.; PIRVERDYAN, A.M.

Solution of some hydraulic problems obeying an exponential law.
Izv.AN Azerb.SSR.Ser.geol.-geog.nauk i nefti no.3:111-117 '62.
(MIRA 15:12)
(Hydraulics—Graphic methods)

PIRVERDYAN, A.M., doktor tekhn.nauk; TROFIMUK, A.A.; EFROS, D.A., kand.-tekhn.nauk; SEREBRENNIKOV, S.A.

Report on the conference on methods held in the All-Union Petroleum Research Institute. Nauch.-tekh. sbor. po dob. nefti no.1:75-82 '58. (MIRA 15:9)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefti (for Pirverdyan). 2. Chlen-korrespondent AN SSSR; laboratoriya podzobeta zapasov Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta (for Trofimuk). 3. Laboratoriya podzemnoy gidrodinamiki Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta (for Efros). (Petroleum research)

PIRVERDYAN, A.M.; DURMISH'YAN, A.G.; CHERNOMORDIKOV, M.Z.

Development of gas-condensate fields in Azerbaijan. Azerb.neft.
khoz. 40 no.12:31-32 D '61. (MIRA 15:8)
(Azerbaijan--Condensate oil wells)

BABICH, Yu.A.; NIKITIN, P.I.; PIRVERDYAN, A.M.

Study of the process of intraboundary flooding of a pool on an EM-8 electric model. Izv. vys. ucheb. zav.; nef't' i gaz 3 no.7: 47-51 '60. (MIRA 15:5)

1. Azerbaydzhanskiy institut nef'ti i khimii imeni M. Azizbekova, AN Azerbaydzhanskoy SSR, i Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobycho nef'ti.
(Oil field flooding--Models)

ALIBEKOV, B.I., kand. tekhn. nauk, PIRVERDYAL, A.M., red., SITEYMEH, A.S., red. izd. na. AHMEDOV, S. : tekhn. red.

[Technical methods and equipment in exploiting oil pools with low formation pressure and intense sanding; up]tehnika i tekhnologiya ekspluatatsii zalezhei nefti s nizkim plastovym davleniem i intensivnym peskoprosavlaniem. Baku, Azerneft, 1962. 162 p. (SUA 16)

(Oil fields - Production methods)

1/57/1/000/007/015/017
E001/E035

AUTHORS: Ishizawa, N.A. and Pirverdyan, A.M. (Moscow)

TITLE: Experimental investigation of the velocity of
cylindrical bodies in the turbulent flow of a
liquid. (Moscow)

PERIODICAL: AN SSSR. Izvestiya. (Moscow)
Tekhnicheskaya nauka. Mekhanika i tekhnologiya,
no. 7, 1962, 170 - 180

Abstract: Ishizawa and Pirverdyan have given the results of experiments on
a cylindrical body falling in a pipe when the flow in the
space between the cylinder and the pipe was turbulent. It is
shown in the present paper that the values of the velocity with
which a cylindrical body falls when the flow is turbulent,
calculated by the method of A.M. Pirverdyan (Aerodinamicheskiye
slozheniya khosyaystvo, no. 1, 1951) and N.A. Ishizawa
(Kolloidnyy zhurnal, no. 1, 1954), agree satisfactorily with the
corresponding experimental data of Minigazimov. The cylinder
falls with constant velocity in a flow of liquid moving in the

Card 1/2

Temporary Arresting Sign

11751 -/000/007/0.7/0.7
E - 1/2535

Figure 11 shows a cross-section of a cylinder of length 2π in the x -direction. The cylinder is divided into two parts by a vertical plane. The left part is labeled "Left" and the right part is labeled "Right". The distance between the two surfaces of the cylinder is 2π . There are 5 figures.

RECEIVED February 7, 1962

3 rd -/-

BABICH, Yu.A.; NIKITIN, P.I.; PIRVERDYAN, A.M.

Dynamics of oil well flooding in nonuniform strata. Azerb. neft.
khoz. 30 no.3(405):20-22 Mr '60. (MIRA 14:9)

(Oil field flooding)

GUKASOV, N.A.; PIRVERDYAN, A.M.

Designing a plunger lift. Azerb. neft. khoz. 40 no.6:28-30 Ja '61.

(Oil wells--Equipment and supplies)

(MIRA 14:8)

PIRVERDYAN, A.M.; NIKITIN, P.I.; RZABEKOV, Z.F.

Research on the development of Azerbaijan oil fields carried out
by the Azerbaijan Scientific Research Institute for Petroleum
Production. Trudy AZNII ~~no~~ no.9:203-211 '60. (MIRA 14:5)
(Azerbaijan—Oil fields—Production methods)

BABICH, E.S.; PIRVERDYAN, A.M.; SUBBOTIN, M.A.

Hydrodynamic study of the process of tar injection into the well
bottom zone. Trudy AzNII DN no.10:389-398 '60. (MIRA 14,14)
(Oil fields—Production methods)

S 040/01/025 000 015021
D276/0306

247300

AUTHOR:

Prislin, A. A. (Baku)

TITLE:

On a method of estimating the approximate solutions for equations of the unsteady percolation of liquids and gases

PERIODICAL:

Prikladnaya matematika i mekhanika, v. 27, no. 9, 1961, 155-160

TEXT. An exact solution of the nonlinear equations of unsteady percolation is beset by many mathematical difficulties. Below, a comparison theorem is given for obtaining simple estimates of approximate solutions to the equation of one-dimensional percolation in a stratum of variable permeability. The well-known problem is considered of a fluid flow in a stratum with zero level of permeability. It is assumed that the permeability coefficient is a given bounded function of the vertical coordinate ($k = k(z)$). Differential equation

$$\frac{d}{du} \left(\frac{1}{k} \right) = (1) \frac{dh}{du} \quad \frac{1}{k} = (2) \frac{dh}{du} \quad (1.3)$$

Card 1/4

On a method of estimating φ .

S. 040'01, 025 004, 015 021
D. 14, 0306

holds where $\varphi(H)$ is a continuous relative function, and $m(H)$ is a variable (with respect to H) of an extended distribution. Eq. (1.3) can be exactly solved for some special types of $m(H)$. Integrating (1.3), one obtains

$$\varphi(H) \frac{dH}{dH} = \varphi(H) \frac{dH}{dH} \Big|_{H=0} + \frac{1}{2} \int_0^H m(H) dH$$

$$\varphi(H) = - \frac{1}{2} \frac{dH}{dH} \varphi(H) \quad \varphi(H) = \int_0^H m(H) dH$$

Hence $\varphi(H)$ can be found. By this method some exact solutions were found which can be used for estimating some approximate solutions. An analysis of these exact solutions shows that to a model non-negative values of $\varphi(H)$ correspond only such functions of saturation distribution which vanish identically for sufficiently large H . Eq. (1.4) can be reduced to

$$Q'' = - \frac{2m(H) \varphi(H)}{Q} + \frac{m'(H)}{m(H)} Q' \quad (3.1)$$

Card 2/4

On a method of estimating

where the prime denotes differentiation with respect to t , and the differential equation

$$p' = \frac{1}{2} \left(\frac{p^2}{1+p^2} + \frac{1}{1+p^2} \right) \quad (3.2)$$

is given. Further, it is shown that the solution of (3.1) is unique and that the solution of (3.2)

$$p_1(t) = p_2(t) = p(t) \quad (3.3)$$

If condition (3.4)

Let $p(t)$ be a solution of (3.1) and (3.2) and let

$$p' = \frac{1}{2} \left(\frac{p^2}{1+p^2} + \frac{1}{1+p^2} \right) \quad (3.4)$$

where

$$p(t) = \frac{1}{2} \left(\frac{p^2}{1+p^2} + \frac{1}{1+p^2} \right) \quad (3.5)$$

Case 3.4

